



# Owner Manual

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## YUKON

Tall Floor Split Systems

36,000 - 120,000 Btu/h

Cooling Only

MCV Series 50/60 Hz



### 50 Hz Models

#### Cooling Only

MCV 036 AB

MCV 048 AB

MCV 060 AB

MCV 090 AB

MCV 120 AB

### 60 Hz Models

#### Cooling Only

MCV 036 A1

MCV 048 A1

MCV 060 A1

MCV 090 A1

MCV 120 A1

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September 2002

MS-SVU002-EN



# General Information

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## General Information

Congratulations on your choice of a Trane MCV vertical floor mounted split system. These systems have been carefully designed and manufactured according to strict **Trane Worldwide Quality Standards** to provide you with years of comfort convenient cooling with minimal service.

This Owner Manual is provided as a guide for the start-up, operation and periodic maintenance by the user of the MCV floor mounted split system. It does not contain the full service procedures necessary for the continued successful operation of this equipment. The services of a qualified service technician should be employed, through a maintenance contract with a reputable service company.

Please read this Manual completely before doing anything with your air conditioning system.

## About this Manual

Cautions appear at appropriate places in this instruction manual. Your personal safety and the proper operation of this machine require that you follow them carefully. The Trane Company assumes no liability for inappropriate use of the unit.

## About the Unit

Trane These MCV units are assembled, pressure tested, dehydrated, charged and run-tested prior to shipment from the factory. The information contained in this manual applies to MCV units designed to operate in the cooling mode only.

The Trane MCV series, is equipped with a microprocessor control to provide flexibility and energy savings.

## Reception

On arrival, please inspect the unit before signing the delivery note. Specify any damage of the unit on the delivery note, and send a registered letter of protest to the last carrier of the goods within 72 hours of delivery. Notify the dealer at the same time.

The unit should be totally inspected within 7 days of delivery. If any concealed damage is discovered, send a registered letter of protest to the carrier within 7 days of delivery and notify the dealer.

## Warning

Warnings are provided at appropriate places in this manual to indicate to installers, operators and service personnel of potentially hazardous situations which, if not avoided, COULD result in death or serious injury.

## Caution

Cautions are provided at appropriate places in this manual to indicate to installers, operators, and service personnel of potentially hazardous situations which, if not avoided, MAY result in minor or moderate injury or malfunction of the unit.

Your personal safety and the proper operation of this unit require that you follow them carefully. The Trane Company assumes no liability for installations or servicing performed by unqualified personnel.

## Warranty

Warranty is based on the general terms and conditions in each country. The warranty is void if the equipment is modified or repaired without the written approval of The Trane Company, if the operating limits are exceeded or if the control system or the electrical wiring is modified.

Damage due to misuse, lack of maintenance or failure to comply with the manufacturer's instructions, is not covered by the warranty obligation. If the user does not conform to the rules described in Owner Manual, it may entail cancellation of warranty and liabilities by The Trane Company.

## Important

These instructions do not cover all variations in systems, nor do they provide for every possible contingency to be met. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to your authorized Trane dealer.

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# Control Operation

## Digital Control

By means of advanced microprocessor technology, Trane brings convenient and accurate room temperature control to its user. It also provides many energy saving features such as the auto fan function.

## Name and Function of Buttons

### 1. POWER

The power button is used to turn the air conditioner on and off operating according to the last program stored in the non-volatile memory.

The Display unit will show

- Room temperature in degree Celsius
- Fan speed

### 2. FAN

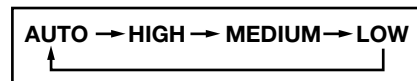
Fan speed (High, Medium or Low) can be altered by using the fan button.

### 3. AUTO FAN

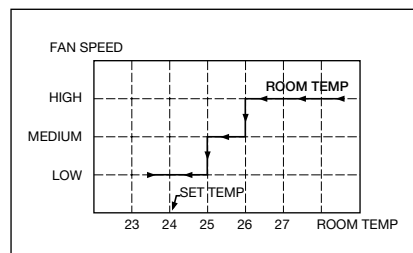
Fan speed can be put in the AUTO mode that the fan speed will be changed automatically depending on the difference between the room temperature and set temperature. If the difference is large, it will operate at high speed for fast cooling. As the difference becomes smaller, the fan speed will be changed automatically to Medium and then Low as indicated by the LED at the position High or Med or Low.

### 4. FAN SPEED

Displays the selected fan speed. Fan speed level Auto, High, Med, or Low will be indicated. Press the fan speed button to select the desired fan speed.

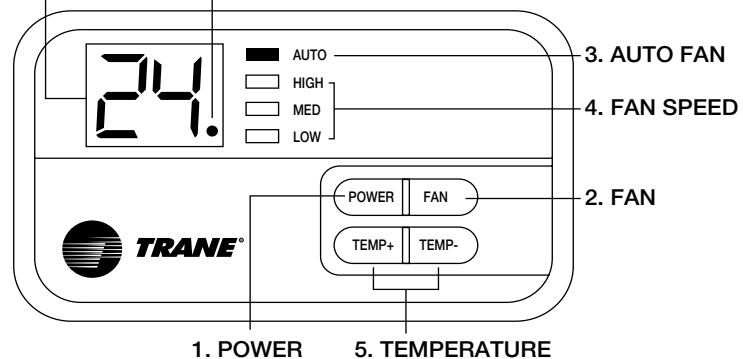


In the FAN AUTO mode, fan speed will be adjusted automatically depending on the difference between the current room temperature and the set temperature. If the difference is large, the fan speed will be high for faster cooling. As the difference becomes smaller, the speed will automatically change to medium and then to low.



TEMPERATURE  
DISPLAY

6. COMPRESSOR  
STATUS



### 5. TEMPERATURE

The TEMP+ and TEMP- buttons are used to adjust the set temperature from 15°C-30°C. When the button is pressed, the control unit will display the set temperature (blinking) instead of the room temperature. After the process is finished, it will revert back to the room temperature within 4 seconds.

### 6. COMPRESSOR STATUS

During compressor operation, the "Compressor Status" indicator blinks.

# System Operation

## Special Features

### Memory

The Trane control keeps the current ON/OFF status, fan speed, and temperature setting in its non-volatile memory. So, if there is a brief power interruption, the control will automatically resume operation with the same fan speed and temperature setting as before the interruption.

### Watchdog

The microprocessor occasionally malfunctions due to voltage fluctuation or other abnormalities. The “watchdog” circuit will reset and restart the micro-processor if this happens.

### Compressor Delay Protection

Each time the compressor is off, there will always be a minimum of a 3-minute delay before the compressor can restart.

### Freeze Protection

When the MCV unit is operating in cool mode and the temperature is very low, there is a chance that the coil might freeze. The freeze protection function will turn the compressor off and operate the unit at a low fan speed in order to defrost the coil.

#### Freeze protection occurs when:

- The coil temperature is less than 0°C.
- The compressor runs continually for at least 10 minutes.

#### During the freeze protection operation:

- The fan operates at low speed (“Low”).
- The compressor stops functioning.
- The “compressor status” indicator blinks.

#### Freeze protection stops when:

- The coil temperature is above 7°C.
- The unit is turned on and off.

During freeze protection operation, the “compressor status” indicator will blink while the other functional indicators operate normally. Any button on the display may be pressed, but the fan speed and compressor function cannot be changed until the freeze protection completes its operation.

### Adjust Air Flow Direction

- The supply air grille may be adjusted **left, right, up or down** manually.
- Adjust the air flow direction properly, otherwise it may cause discomfort and make the room temperature uneven.

### Operating Precautions

This system must be installed properly by a qualified installer in accordance with the installation instructions.

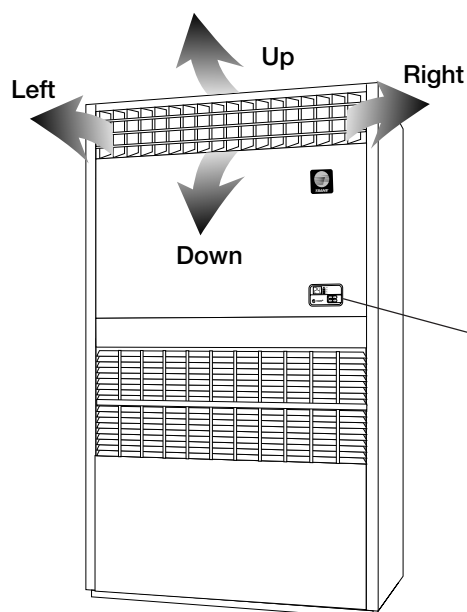
#### Stop the air conditioner at once, if any of the following should occurs:

- The power cord is too hot to be touched by hand.
- The insulation of the power cord is exposed at any point.
- The fuse is blown or circuit breaker trips frequently.
- The functions of the switches are inaccurate.

### Operating Air Conditioner Safety

- Do not insert a bar or similar object into the supply air grille. In particular, advise small children not to insert anything in the grille.
- Do not pour water directly on the air conditioner to clean it. If the air conditioner is operating when wet, grounding may occur, damaging the unit.
- Adjust the air flow so it does not blow directly on room occupants.
- Do not use flammable sprays near the air conditioner because of the danger of fire.
- Do not use a steel or copper wire in place of fuses.
- Do not inspect or service the air conditioner while it is operating.
- Turn off the power supply before doing any inspection or service work.
- The power cord should be kept away from furniture with sharp corners. It may cause fire or electric shock.
- When the air conditioner will not be used for a long time, be sure to turn **OFF** the power supply.

If you have any questions or problems with your air conditioning system, please consult your nearest Trane dealer.



**Figure 1**

# Maintenance

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## Regular Maintenance

Be sure to disconnect the power before inspection or maintenance of air conditioner.

### 1. Cleaning the Air Filter

Air flow is reduced and cooling efficiency impaired if the filter is clogged. Be sure to clean the filter every two weeks during the cooling season.

#### 1.1 How to remove the air filters

- Open access panel by pulling down (Figure 2).
- Pull up each air filter frame from the return air grille (Figure 3).

#### 1.2 How to clean the air filter

Wash away dust from the air filter with clean water or vacuum it with an electric vacuum cleaner.

**Note:** Once the air filter is washed, dry it completely before returning it to its original position.

#### Cautions

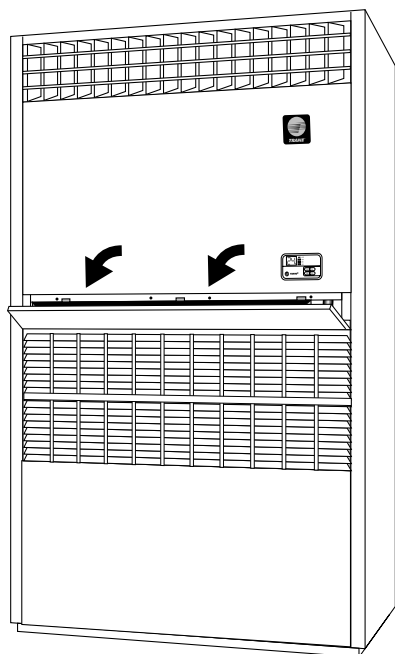
- Do not wash the air filter in water that is over 40°C or it may shrink.
- Do not expose the air filter to fire.
- Do not expose the air filter to direct sunlight for a long period of time.
- Clean the air filter more frequently when the air is very dirty.

### 2. Cleaning the Front Panel

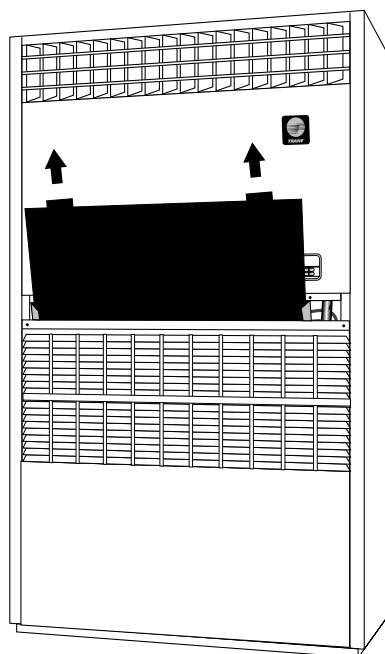
Do not pour water directly on the front panel to clean it. Dust or wipe it lightly with a soft cloth. If it is very dirty, use a soft cloth soaked in water or a neutral detergent.

#### Cautions

- Do not use water over 50°C to clean the front panel or it may become discolored.
- Do not use benzine, gasoline, thinner, polishing compound, machine oil, etc. when cleaning the front panel, or paint may peel off, or it may become deformed or damaged.



**Figure 2**



**Figure 3**

# Troubleshooting

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Before calling for service,  
please check the following.

## **The air conditioner does not operate at all:**

- Check if the control power switch is OFF. Press the switch to ON.
- Check whether the fuse has been blown or circuit breaker thrown. Set the power switch to OFF, and turn on the circuit breaker or replace to a new fuse.
- Check whether the power supply is interrupted. Wait until the power is resupplied and then operate the air conditioner.

## **Cooling is insufficient:**

- Check whether the air filter is clogged. Clean it.
- Check whether the thermostat setting is too high. Set the thermostat to lower temperature.
- Check whether windows or doors are opened. If opened, close them.
- Check whether there are sources of heat in the room, cooling is less effective.
- Check whether the return air grille or the supply air grille on the indoor unit and outdoor unit are blocked. If they are blocked, remove obstacles to make air passage clear.
- Check whether the fan speed is set at low. Set the fan switch from "LOW" to "MEDIUM" or "HIGH"



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Since The Trane Company has a policy of continuous product improvement, it reserves the right to change design and specifications without notice.